

# Achieving Patient Satisfaction With Premium IOLs

Follow these seven practical pearls for successful outcomes.

BY MICHAEL C. KNORZ, MD

**M**y practice is mainly refractive surgery. I perform laser corneal surgical procedures including LASIK and surface ablation, I implant phakic IOLs, and I now execute refractive lens surgery with an intraocular femtosecond laser. The way my practice is designed, premium IOLs account for a significant part of my lens-based procedure volume. I primarily use multifocal IOLs, as one of the most important requirements for a premium IOL is, in my experience, good near vision for reading. I typically implant the nontoric or toric AcrySof IQ ReStor +3.0 D IOL (Alcon Laboratories, Inc.). During the past 20-plus years I have been implanting multifocal IOLs (starting with the 3M diffractive multifocal IOL in 1989), I have learned several important lessons that I would like to share.

## SEVEN LESSONS

**Lesson No. 1: Deliver good near vision.** Presbyopia is quite frustrating, and patients will accept many side effects in exchange for the ability to see well at near again. It is, therefore, of utmost importance to deliver good quality near vision. Patients must be able to read newspapers and books, at least in

good light. In my experience, this can be achieved only with multifocal IOLs. I stopped implanting accommodating IOLs, as near vision with these lenses is simply not good enough.

**Lesson No. 2: Acknowledge patients' need for intermediate vision.** In addition to good near vision,



Figure 1. This night-driving simulation can be shown to patients on an iPad or any computer screen.

Courtesy of Patient Education Concepts, Inc. and Epeland Design Network GmbH

## COVER STORY

## TAKE-HOME MESSAGE

- One of the most important requirements for a premium IOL is that it provide good near vision for reading.
- Before surgery, the patient should be told that neural adaptation is a process that may take weeks to months and that the visual recovery process is different for every patient.
- The key to success is careful patient selection and setting the right expectations.

patients also want to see their laptops and their smartphones without moving too close to the screen. A multifocal IOL with a lower near add (3.00 D rather than 4.00 D) will help. The main reason for decreased intermediate vision with the 4.00 D add IOL is not the actual location of the near point, which is only a few centimeters different from the 3.00 D add IOL, but rather the drop in visual acuity between distance and near foci. When a 4.00 D add IOL is implanted, visual acuity drops to less than 20/40 between the two focal points; an acuity of 20/30 or better will be achieved at all distances when a 3.00 D add IOL is implanted.

**Lesson No. 3: Clarify to the patient that optical side effects are common.** Most patients accept halos and glare without any complaints, but they need to know to expect them. I explain to every patient that halos occur because the IOL forms a second image and that this image is an integral part of multifocal technology. The brain compensates for these images in due course (see Lesson No. 4). I also show the patient an image of a night-driving situation with halos present, which I have ready on an iPad (Apple Inc.) and on my computer screen. This image, which is from the IOL Counselor software (Figure 1; Patient Education Concepts, Inc., and Eyeland Design Network GmbH), serves both as a deterrent to exclude patients who would not accept halos and as a reassurance to those who have no idea what a halo looks like.

**Lesson No. 4: Make sure the patient understands that neural adaptation is a process.** Most patients see quite well as early as 1 day after implantation of a multifocal IOL. However, some require weeks or months to adjust to multifocal vision. Therefore, it is important to tell patients before surgery that neural adaptation may take weeks to months. I typically explain that the brain must learn how to use the multifocal IOL, and I remind patients who do not see well early on that the visual recovery process is different for every patient.

**Lesson No. 5: Address astigmatism.** A multifocal IOL will not perform well if the patient has more than 0.50 D of astigmatism, and therefore astigmatism

should be corrected during or after surgery. I used to perform manual limbal relaxing incisions (LRIs), and I always placed my incision on the steep corneal meridian. In July 2011, I began using the LenSx femtosecond laser (Alcon Laboratories, Inc.) to perform laser refractive lens surgery. As a result, the predictability of my LRIs has greatly improved. In those patients who still have residual astigmatism or ametropia 3 months after surgery and who are not happy with their vision, I will perform LASIK or surface ablation to address the residual error.

**Lesson No. 6: IOL exchange is the best option in some cases.** I like to inform patients that there is a small risk (1:1,000) that multifocal technology will not work for them. I also elaborate that an IOL exchange is possible in the unlikely event that they do not see well enough with their multifocal IOL. It has been my experience that patients consider it reassuring that there is a way out in case they are not happy.

**Lesson No. 7: Learn to identify ideal candidates.** The ideal patient for a multifocal IOL is a hyperope (2.00 D or more). Patients with hyperopic astigmatism are also suitable if a toric multifocal IOL is available or if the astigmatism is addressed with LRIs or LASIK. The second-best patient is a high myope (-6.00 D or higher). All others should be counseled about a higher risk of optical side effects and potential need for IOL exchange. If patients are able to accept those side effects, visual results can be excellent even in low myopes or emmetropes.

## CONCLUSION

My overall experience with various multifocal designs has been positive, and I consider them an important part of my practice. In more than 60% of all refractive lens exchange or cataract procedures I performed in 2010 and 2011, I implanted a multifocal IOL. The key to success is careful patient selection and setting the right expectations. The steps outlined here will help you achieve those objectives. ■

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